

What is claimed is:

1. An optical information-recording medium, comprising a dye having at least two chromophores bonded to each other without any conjugated bond intervening between said chromophores.

2. An optical information-recording medium as described in claim 1, having a thickness of 1.2 ± 0.2 mm and comprising two laminates each containing a recording layer including the dye; in which the two laminates are bonded each other so that each of the recording layers is inside,

wherein each of the laminates includes:

a transparent disk-shape substrate having a pregroove formed with a track pitch of 0.6 to 0.9 μm and measuring one of 120 ± 3 mm and 80 ± 3 mm in diameter and 0.6 ± 0.1 mm in thickness; and

the recording layer provided on the pregroove-formed side of the transparent disk-shape substrate.

3. An optical information-recording medium as described in claim 1, having a thickness of 1.2 ± 0.2 mm,

the optical information-recording medium comprising:

a laminate containing a recording layer including the dye;

and

a disk-shape protective plate;

in which the laminate and the disk-shape protective plate

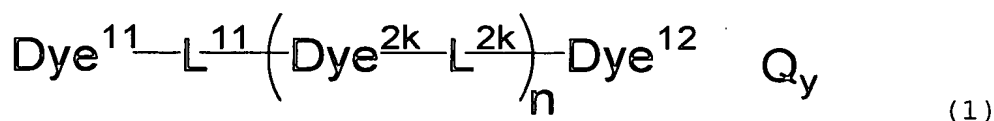
are bonded each other so that the recording layer is inside,

wherein the laminate includes:

a transparent disk-shape substrate having a pregroove formed with a track pitch of 0.6 to 0.9 μm and measuring one of 120 ± 3 mm and 80 ± 3 mm in diameter and 0.6 ± 0.1 mm in thickness; and

the recording layer provided on the pregroove-formed side of the transparent disk-shape substrate.

4. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (1):



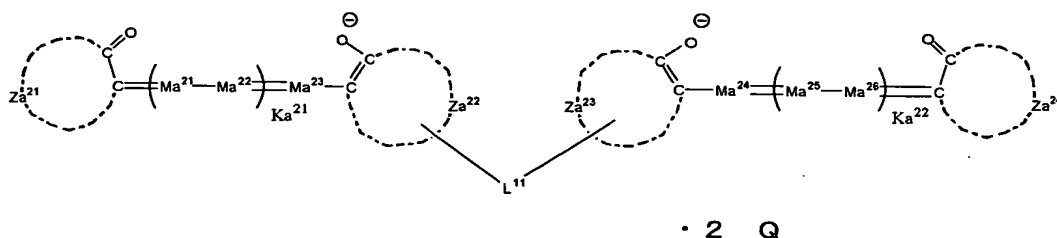
wherein Dye^{11} , Dye^{12} and Dye^{2k} each independently represents a dye residue having a chromophore, L^{11} and L^{2k} each independently represent a divalent linkage group forming no π -conjugated system between chromophores linked thereby, n represents an integer of 0 to 10, k represents all integers in the 0 to n range, Q represents an ion neutralizing electric charge, and y is a number required for neutralization of electric charge.

5. An optical information-recording medium as described in claim 4, wherein the chromophore forming the dye residue

represented by any of Dye¹¹, Dye¹² and Dye^{2k} is at least one of cyanine dyes, merocyanine dyes and oxonol dyes.

6. An optical information-recording medium as described in claim 4, wherein all the chromophores forming the dye residues represented by Dye¹¹, Dye¹² and Dye^{2k} are oxonol dyes.

7. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (6):

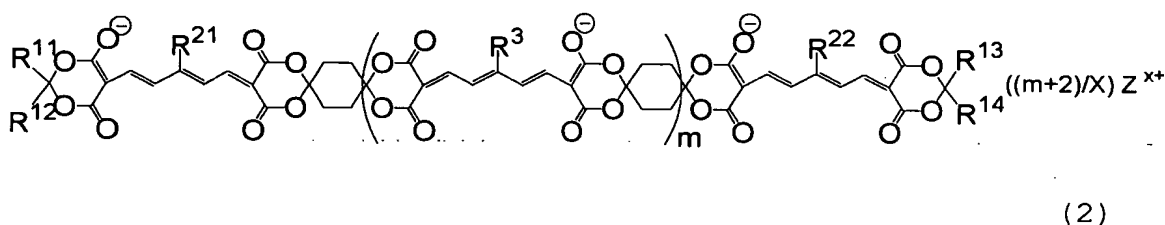


(6)

wherein Z_a^{21} , Z_a^{22} , Z_a^{23} and Z_a^{24} each independently represent atoms forming an acidic nucleus, Ma^{21} , Ma^{22} , Ma^{23} , Ma^{24} , Ma^{25} and Ma^{26} each independently represent a substituted or unsubstituted methine group, L^{11} is a divalent linkage group forming no π -conjugated system together with its two bonds, Ka^{21} and Ka^{22} each independently represent an integer of 0 to 3, and Q represents a univalent cation for neutralizing electric charge, or $2Q$ represents a divalent cation; and Ma^{21} s, Ma^{22} s, Ma^{25} s and Ma^{26} s present in a case where Ka^{21} and Ka^{22} are each 2 or 3 may be the

same or different.

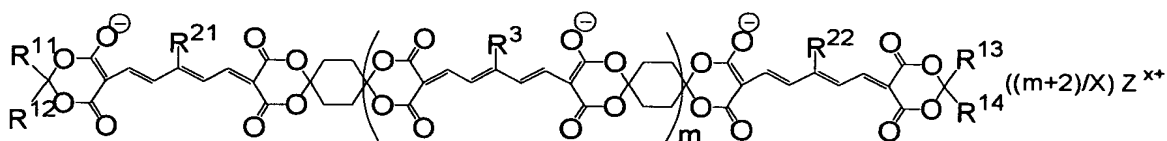
8. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (2):



wherein R^{11} , R^{12} , R^{13} and R^{14} each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group, R^{21} , R^{22} and R^3 each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aryloxy group, a substituted or unsubstituted heterocyclic group, a halogen atom, a carboxyl group, a substituted or unsubstituted alkoxy carbonyl group, a cyano group, a substituted or unsubstituted acyl group, a substituted or unsubstituted carbamoyl group, an amino group, a substituted amino group, a sulfo group, a hydroxyl group, a nitro group, a substituted or unsubstituted alkylsulfonylamino group, a substituted or unsubstituted arylsulfonylamino group, a substituted or unsubstituted carbamoylamino group, a

substituted or unsubstituted alkylsulfonyl group, a substituted or unsubstituted arylsulfonyl group, a substituted or unsubstituted alkylsulfinyl group, a substituted or unsubstituted arylsulfinyl group or a substituted or unsubstituted sulfamoyl group, m represents an integer of 0 or more, R³s may be the same or different when m is 2 or more, Z^{x+} represents a cation, and x represents an integer of 1 or more.

9. An oxonol compound represented by the following formula (2):



(2)

wherein R¹¹, R¹², R¹³ and R¹⁴ each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group, R²¹, R²² and R³ each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aryloxy group, a substituted or unsubstituted heterocyclic group, a halogen atom, a carboxyl group, a substituted or unsubstituted alkoxycarbonyl group, a cyano group, a substituted or unsubstituted acyl group, a substituted or

unsubstituted carbamoyl group, an amino group, a substituted amino group, a sulfo group, a hydroxyl group, a nitro group, a substituted or unsubstituted alkylsulfonylamino group, a substituted or unsubstituted arylsulfonylamino group, a substituted or unsubstituted carbamoylamino group, a substituted or unsubstituted alkylsulfonyl group, a substituted or unsubstituted arylsulfonyl group, a substituted or unsubstituted alkylsulfinyl group, a substituted or unsubstituted arylsulfinyl group or a substituted or unsubstituted sulfamoyl group, m represents an integer of 0 or more, R³s may be the same or different when m is 2 or more, Z^{x+} represents a cation, and x represents an integer of 1 or more.

10. A method of recording information comprising recording information on an optical information-recording medium as described in claim 1 by irradiation with laser light having a wavelength of 600 to 700 nm.

11. A method of recording information comprising recording information on an optical information-recording medium as described in claim 2 by irradiation with laser light having a wavelength of 600 to 700 nm.

12. A method of recording information comprising recording information on an optical information-recording

medium as described in claim 3 by irradiation with laser light having a wavelength of 600 to 700 nm.

13. A method of recording information comprising recording information on an optical information-recording medium as described in claim 4 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

14. A method of recording information comprising recording information on an optical information-recording medium as described in claim 5 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

15. A method of recording information comprising recording information on an optical information-recording medium as described in claim 6 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

16. A method of recording information comprising recording information on an optical information-recording medium as described in claim 7 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

17. A method of recording information comprising recording information on an optical information-recording

medium as described in claim 8 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.